Amendment dated March 26, 2003

Reply to Office Action of December 31, 2002

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (currently amended): A delay circuit comprising:

a clocked inverter circuit to which a first pulse signal is supplied, said clocked inverter circuit changing the pulse width of said first pulse signal in a first direction outputting a second pulse signal having one of a first pulse width and a second pulse width, the first pulse width being greater than a pulse width of the first pulse signal and the second pulse width being smaller than the pulse width of the first pulse signal; and

a logic circuit to which a the second pulse signal output from a preceding stage the clocked inverter circuit and anthe inverted signal of said first pulse signal are supplied, wherein said logic circuit outputs a third pulse signal whose pulse width is changed to a second direction opposite to the first direction, the third pulse signal having the other one of the first pulse width and the second pulse width.

Claim 2 (original): The delay circuit according to claim 1, wherein said logic circuit is a NOR circuit and said clocked inverter circuit delays a trailing edge of said third pulse signal.

Claim 3 (original): The delay circuit according to claim 1, wherein said logic circuit is a NAND circuit and said clocked inverter circuit delays a leading edge of said third pulse signal.

Clàim 4 (original): The delay circuit according to claim 1, wherein said clocked inverter circuit is composed of an NMOS transistor and a PMOS transistor and at least one of a channel width, channel length, threshold voltage, and substrate voltage of the NMOS is different from a channel width, channel length, threshold voltage, and substrate voltage of the PMOS transistors.

Claim 5 (original): The delay circuit according to claim 4, wherein a ratio of a current driving capability of said PMOS transistor to a current driving capability of said NMOS transistor is set to a value other than one and a rise time of a pulse signal is made different from a decay time of the pulse signal.

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Claim 6 (currently amended): A delay circuit comprising:

an inverter circuit controlled by a clock signal to which a first pulse signal is supplied, said inverter circuit—changing the pulse width of said first pulse signal in a first direction catputting a second pulse signal having one of a first pulse width and a second pulse width, the first pulse width being greater than a pulse width of the first pulse signal and the second pulse width being smaller than the pulse width of the first pulse signal; and

a logic circuit to which a the second pulse signal output from a preceding stage the inverter circuit and the inverted signal of said first pulse signal are supplied, wherein said logic circuit outputs a third pulse signal whose pulse width is changed to a second direction opposite to the first direction, the third pulse signal having the other one of the first pulse width and the second pulse width.

Claim 7 (previously added): The delay circuit according to claim 6, wherein said logic circuit is a NOR circuit and said inverter circuit delays a trailing edge of said third pulse signal.

Claim 8 (previously added): The delay circuit according to claim 6, wherein said logic circuit is a NAND circuit and said inverter circuit delays a leading edge of said third pulse signal.

Claim 9 (previously added): The delay circuit/according to claim 6, wherein said inverter circuit is composed of an NMOS transistor and a PMOS transistor, and at least one of a channel width, channel length, threshold voltage and substrate voltage of the NMOS transistor is different from a channel width, channel length, threshold voltage and substrate voltage of the PMOS transistor.

Claim 10 (previously added): The delay circuit according to claim 9, wherein a ratio of a current driving capability of said PMOS transistor to a current driving capability of said NMOS transistor is set at a value other than one and a rise time of said first pulse signal is made different from the decay time of said first pulse signal.

Claim 11 (currently amended): A delay circuit applied to a synchronizing circuit comprising:

a first delay line which includes unit delay elements and transfers a forward pulse signal;

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a second delay line which includes unit delay elements and transfers a backward pulse signal; and

a state holding section which is brought into a set state or a reset state according to a transfer position of the forward pulse signal transferred along said first delay line and said backward pulse signal transferred along said second delay line in the set state and a clock signal along said second delay line in the reset state,

wherein each of said unit delay elements constituting said first and second delay lines includes:

a clocked inverter circuit to which a first pulse signal corresponding to one of said forward and backward pulse signals output from a preceding delay unit is supplied, said clocked inverter circuit changing a pulse width of said first pulse signal in a first direction outputting a second pulse signal having one of a first pulse width and a second pulse width, the first pulse width being greater than a pulse width of the first pulse signal and the second pulse width being smaller than the pulse width of the first pulse signal; and

a logic circuit to which a-the second pulse signal output from a preceding stage-the clocked inverter circuit and an inverted signal of said first pulse signal are supplied, wherein said logic circuit outputs a third pulse signal whose pulse width is changed to a second direction opposite to the first direction, the third pulse signal having the other one of the first pulse width and the second pulse width.

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Claim 12 (previously added): The delay circuit according to claim 11, wherein said logic circuit is a NOR circuit and said clocked inverter circuit delays a trailing edge of said first pulse signal.

claim 13 (previously added): The delay circuit according to claim 11, wherein said logic circuit is a NAND circuit and said clocked inverter circuit delays a leading edge of said first pulse signal.

Claim 14 (previously added): The delay circuit according to claim 11, wherein said clocked inverter circuit is composed of an NMOS transistor and a PMOS transistor, and at least one of a channel width, channel length, threshold voltage and substrate voltage of the NMOS transistor is

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different from a channel width, channel length, threshold voltage and substrate voltage of the PMOS transistor.

Claim 15 (previously added): The delay circuit according to claim 14, wherein a ratio of a current driving capability of said PMOS transistor to a current driving capability of said NMOS transistor is set at a value other than one and a rise time of said first pulse signal is made different from the decay time of said first pulse signal.

Claim 16 (new): A delay circuit comprising:

a clocked inverter circuit to which a first pulse signal is supplied, said clocked inverter circuit outputting a second pulse signal having a pulse width wider than a pulse width of the first pulse signal; and

a logic circuit to which the second pulse signal output from the clocked inverter circuit and an inverted signal of the first pulse signal are supplied, wherein said logic circuit outputs a third pulse signal, the third pulse signal having a pulse width narrower than the pulse width of the second pulse signal and equal to the pulse width of the first pulse signal.

Claim 17 (new): A delay circuit comprising:

a clocked inverter circuit to which a first pulse signal is supplied, said clocked inverter circuit outputting a second pulse signal having a pulse width narrower than a pulse width of the first pulse signal; and

a logic circuit to which the second/pulse signal output from the clocked inverter circuit and an inverted signal of the first pulse signal are supplied, wherein said logic circuit outputs a third pulse signal, the third pulse signal/having a pulse width wider than the pulse width of the second pulse signal and equal to the pulse width of the first pulse signal.